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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,924	11/21/2001	Chang-Weon Jang	678-744(P9838)	1955

7590 06/17/2004

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EXAMINER
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LE, DANH C

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 06/17/2004

3

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/989,924

Applicant(s)

JANG, CHANG-WEON

Examiner

DANH C LE

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myllymaki (US 6,510,328) in view of Morito (US 2002/0021657) and Katakubo (US 5,731,964).

As to claim 1, Myllymaki teaches a portable communication device (figure 1), comprising:

a body housing including an upper housing with a flexible board circuit (2) on which a keypad is mounted, a lower housing vertically spaced from the upper housing by a predetermined distance and including a printed circuit board (3) assembly, and a middle housing between the upper housing and the lower housing, separated from the lower housing by a battery and a battery pack into a hollow space and attachable to and detachable from the middle housing in a lengthwise direction, for supplying power to the portable communication device.

Myllymaki fails to teach having a slot opened from an end and a separation plate for blocking electromagnetic waves generated from the PCB assembly. Morito teaches having a slot opened from an end (figure 2, 202). Katakubo teaches a separation plate for blocking electromagnetic waves generated from the PCB assembly (figure 3, 11, 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time

the invention was made to provide the teaching of Morito and Katakubo into the system of Myllymaki in order to slide the battery into the slot and shielding unnecessary electromagnetic radiation by covering a printing circuit board.

3. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myllymaki (US 6,510,328), Morito (US 2002/0021657) and Katakubo (US 5,731,964) in view of Chandra (US 6,308,074).

As to claims 2 and 3, the combination of Myllymaki, Morito and Katakubo teaches portable communication device of claim 1. The combination of Myllymaki, Morito and Katakubo fails to teach at least one connection port and at least one charging port at an exposed end. Chandra teaches at least one connection port and at least one charging port at an exposed end (figure 1b, 30, 34). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Chandra into the system of Myllymaki, Morito and Katakubo in order to provide for charging of the battery in cellular telephone.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myllymaki (US 6,510,328), Morito (US 2002/0021657) and Katakubo (US 5,731,964) in view of McKay (US 6,455,188).

As to claim 4, the combination of Myllymaki, Morito and Katakubo teaches portable communication device of claim 1. The combination of Myllymaki, Morito and Katakubo fails to teach a locking device for locking the sliding battery pack in the slot when inserted into said slot. McKay teaches a locking device for locking the sliding

battery pack in the slot when inserted into said slot (col.3, line 58-col.4, line 19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of McKay into the system of Myllymaki, Morito and Katakubo in order to hold the battery in operating position in a battery compartment.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myllymaki (US 6,510,328) in view of Katakubo (US 2002/0021657).

As to claim 7, Myllymaki teaches portable communication device (figure 1), comprising:

an upper housing having a keypad;

a lower housing connected to said upper housing, said lower housing having a printed circuit board (PCB) connected to said keypad;

a battery pack connectable between said upper housing and said lower housing.

Myllymaki fails to teach a separation plate located between said battery pack and said lower housing for reducing a specific absorption rate of electromagnetic waves generated from said PCB. Katakubo teaches a separation plate located between said battery pack and said lower housing for reducing a specific absorption rate of electromagnetic waves generated from said PCB (figure 3, 11, 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Katakubo into the system of Myllymaki in order to shield unnecessary electromagnetic radiation by covering a printing circuit board.

***Allowable Subject Matter***

6. Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 5 and 6, the teaching of above prior arts either alone or in combination fails to teach a locker having two free ends with respect to a hinge shaft, one of the free ends exposed from a side end of the middle housing to be pressed externally and the other free end disposed in the middle housing to lock the sliding battery pack and a locking groove formed at a predetermined position of a side end of the sliding battery pack to mate with the other free end of the locker that rotates when the one free end of the locker is pressed.

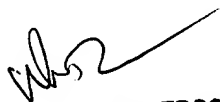
Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANH C LE whose telephone number is 703-306-0542. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM TROST can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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